

Pesticide Educational Resources Collaborative – medical (PERC-med)

**4th Quarter Report: December 1, 2019 – February 29, 2020
Annual Report: March 1, 2019 – February 29, 2020**

Second Operational Year: 3/01/19 – 2/29/20

**Cooperative Agreement # X8-83935901
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PERC-med’s Goal and Objective

The objective of the Pesticide Educational Resources Collaborative for Medical Professionals (PERC-med) is to help educate the medical community on how to prevent, recognize, and treat pesticide-related health conditions and build on the progress of a previous project titled, “From the Fields to the Exam Room: Integrating the Recognition, Management and Prevention of Pesticide Poisonings into the Primary Care Setting.” This is complementary of the Environmental Protection Agency’s Strategic Plan, Goal 1 – Core Mission, Objective 1.4 - Ensure Safety of Chemicals in the Marketplace: Effectively implement the Toxic Substances Control Act, and the Federal Insecticide, Fungicide, and Rodenticide Act.

PERC-med is a cooperative agreement (#X8-83935901) between the U.S. Environmental Protection Agency’s Office of Pesticide Programs and University of California Davis Extension, in collaboration with Oregon State University.

Submitted to:

U.S. Environmental Protection Agency
Office of Pesticide Programs

Submitted on March 31, 2020 by:

Suzanne Forsyth
PERC-med Administrator and PI

Program Highlights and Summary

A significant effort was spent this past year on direct outreach activities. PERC-med delivered the following training sessions and educational materials for medical professionals and key stakeholders:

1. On April 30, 2019, Advisory Board member Dr. Ouahiba Laribi's colleague introduced PERC-med in a slide presentation to occupational physicians at the American Occupational Health Conference (AOHC) in Anaheim in front of 125 attendees.
2. On June 24-27, 2019, Advisory Board member Dr. Diane Rohlman presented a poster describing paraquat poisoning symptoms at the International Society for Agriculture Safety and Health (ISASH) conference in Des Moines, Iowa. The poster was co-written by the PERC-med team in collaboration with Dr. Rohlman.
3. On October 14, 2019, Diana Simmes delivered an oral presentation on pesticides and PERC-med to an audience of approximately 20 attendees during the Oregon Public Health Association (OPHA) Annual Meeting in Corvallis, Oregon.
4. On October 29, 2019, Diana Simmes delivered a guest lecture at Oregon State University and distributed PERC-med promotional postcards to 12 graduate students, including 10 MPH second year students and two doctoral students.
5. On October 30, 2019, Diana Simmes presented a webinar about pesticides to the AgriSafe Nurse Scholar's Program for the 31 program participants to view. All participants are required to view the webinar to obtain Continuing Nursing Education (CNE) units.
6. On November 19, 2019, Diana Simmes presented a talk on health risk to over 80 licensed pesticide applicators during the Willamette Valley CORE Pesticide Safety Education Program (PSEP) Training in Corvallis, Oregon. Diana Simmes talked about pesticide-related knowledge in the medical community.
7. On January 15, 2020, Diana Simmes participated as a guest speaker on the Tribal Pesticide Program Council (TPPC) Executive Committee and shared the extended deadline for PERC-med's request for project ideas. Diana gave a 15-minute presentation on PERC-med and sent the presentation slides to TPPC Executive Committee after the meeting.
8. In February 2020, the newsletter article "Pesticides for COVID-19 Infection Control" written by PERC-med was distributed by the Community Health Association of Mountain/Plain States (CHAMPS) to their listserv of approximately 1,466 subscribers. The article included links to the PERC-med resources webpage and contact information for the team.
9. On February 27, 2020, Diana Simmes recorded the AgriSafe Network Nurse Scholar Program webinar on an introduction to pesticides and a nurse's role in relation to the [national pesticide competency guidelines](#). The newly recorded webinar will be included in the 2020 Nurse Scholar Program's learning lab and bundled within a larger packet of CNE units for program participants. The program anticipates 50 participants in 2020. All participants are required to view the webinar to obtain CNE units. Metrics for this webinar will be reported in future reports at the conclusion of the 2020 Nurse Scholar Program.

Key informant interviews were conducted with all Advisory Board members. In addition, at least 30 direct contacts have been made among stakeholder groups including:

1. AgriSafe Network Nurse Scholar Program
2. American Academy of Family Physicians (AAFP)
 - a. Climate Change Member Interest Group Physician Chair
 - b. Rural Health Member Interest Group Physician Chair
3. American Association of Pesticide Safety Educators (AAPSE)
4. American Association of Poison Control Centers (AAPCC)
5. Association of Public Health Nurses (APHN)
6. Center for Occupational and Environmental Health (COEH) Continuing Education, University of California, Berkeley
7. Center for Public Issues Education in Agriculture and Natural Resources, University of Florida (and subsequently the Southeastern Coastal Center for Agricultural Health and Safety)
8. Community Health Association of Mountain/Plains States (CHAMPS)
9. Community Healthcare Association of the Dakotas (Primary Care Association)

10. Eastern Area Health Education Center (Eastern AHEC)
11. Healthcare Education and Training, UC Davis Continuing and Professional Education
12. Kashia Band of Pomo Indians (and subsequently Sonoma County Indian Health Project, Inc. (SCHIP) California Rural Indian Health Board (CRIHB), and Region 9 Regional Tribal Operations Committee (RTOC))
13. Migrant Clinicians Network
14. National Environmental Education Foundation (NEEF formerly NEETF)
15. North Carolina Agromedicine Institute
16. Northwest Regional Primary Care Association (NWRPCA)
17. North Carolina Farmworker Health Program/North Carolina Department of Health and Human Services
18. Oregon Health & Science University (OHSU)
19. Oregon Health Authority
20. Oregon Pesticide Analytic and Response Center (PARC)
21. Oregon Poison Control Center (serves Oregon, Alaska and Guam)
22. Oregon Public Health Association
23. Oregon State University, Environmental Health Science Center
24. Pacific Northwest Agricultural Safety and Health Center (PNASH)
25. Office of Continuing Medical Education, UC Irvine School of Medicine
26. Student Action with Farmworkers (SAF)
27. Tribal Pesticide Program Council (TPPC)
28. UC Davis Health (Internal Communications Newsletter Opportunity)
29. Western Center for Agricultural Health and Safety, University of California, Davis (and subsequently the 11 NIOSH funded [Centers for Agricultural Safety and Health](#))
30. Wyoming Primary Care Association

Potential partnerships for the promotion of PERC-med resources are under development with healthcare provider organizations including the Association for Public Health Nurses (APHN), the American Academy of Family Physicians' (AAFP) Rural Health and Climate Change & Environmental Health Member Interest Groups, and the National Environmental Education Foundation (NEEF). Several calls were held with the NEEF Health and Wellness Program Director who oversees the Pediatric Asthma programming. These calls included leveraging mutual speaking opportunities including a possible national child health forum that NEEF is in the initial stages of planning. Partnerships will continue to be pursued with these national organizations.

Enhancements have been made to [PERC-med's website](#). PERC-med developed two printable informational sheets posted on the PERC-med resources webpage: 1) "[Paraquat Poisoning: One Sip Can Kill](#)" based on information from the paraquat poisoning poster presented by Advisory Board member Dr. Diane Rohlman at the International Society for Agriculture and Safety (ISASH) conference, and 2) "[Medical Evaluations Prior to Using a Respirator: What medical professionals need to know](#)" reviewed by two subject matter experts, Charlotte Halverson and Robin Tutor Marcom. PERC-med has [posted](#) and widely distributed a "Request for Project Ideas 2020" solicitation to gather input of resource needs and project ideas. PERC-med received submissions from the following stakeholder organizations:

1. Center for Healthcare Policy and Research, University of California, Davis
2. Department of Environmental & Occupational Health Sciences, University of Washington
3. Lurie Children's Hospital, Northwestern University
4. National Pesticide Information Center, Oregon State University
5. Northwest Center for Alternatives to Pesticides
6. Office of Environmental Health Hazard Assessment, California Environmental Protection Agency
7. Office of Environmental Public Health Sciences, Washington State Department of Health
8. Oregon Institute of Occupational Health Sciences, Oregon Health & Science University

Advisory Board member activities throughout Year 2 include the following contributions:

- Proposing a fast-track project idea to the PERC-med team to collaborate on developing an online pesticide education module based on the existing Agricultural Safety and Health: The Core Course [training](#). (Diane Rohlman)
- Referencing PERC-med materials in Rural Health and Agricultural Medicine course lectures at the University of Iowa and the University of Missouri Kansas City. (Diane Rohlman)
- Referencing PERC-med resources during webinar presentations related to personal protective equipment and employee education. (Charlotte Halverson)
- Reviewing the occupational respirator use and medical evaluation information sheet developed by PERC-med as a subject-matter expert. (Charlotte Halverson)
- Sending the “Request for Project Ideas” to Pacific Northwest Agricultural Safety and Health Center (PNASH) and to the Northwest Pediatric Environmental Health Specialty Unit (PEHSU). (Catherine Karr)
- Submitting project ideas to PERC-med for 2020 and beyond. (Fred Berman, Catherine Karr)

Objectives and Deliverables

Objective 1: Provide continuing education, training and technical assistance to relevant audiences.

Output A: Training sessions for medical professionals using old and new training models

Anticipated out-comes for Q1-Q4	Actual outcomes	Next quarter
Track the number of webinars, presentations, or training sessions for medical professionals that are developed, delivered, or distributed by PERC-med. (Q4)	<p>On October 14, 2019, Diana Simmes delivered an oral presentation on pesticides and PERC-med to an audience of approximately 20 attendees during the Oregon Public Health Association (OPHA) Annual Meeting in Corvallis, Oregon.</p> <p>Diana Simmes presented a webinar on pesticides for the AgriSafe Network Nurse Scholar Program on October 30, 2019. The webinar was recorded and posted in the program’s learning lab for all 31 program participants to access. The webinar was bundled within a larger packet of Continuing Nursing Education units for program participants.</p> <p>On February 27, 2020, Diana Simmes recorded a second webinar for the AgriSafe Network Nurse Scholar Program. The newly recorded webinar will be included in the 2020 Nurse Scholar Program’s learning lab and bundled within a larger packet of Continuing Nursing Education units for program participants.</p>	
Track the number and nature of uses/contacts between medical professionals and the resources created and/or distributed. (Q1-Q4)	PERC-med has curated a set of accessible online resources that focus on pesticides and human health. The resources webpage received 484 views this quarter, double the number of views from last quarter (210 views). The resources webpage received a total of 841 views in Year 2.	Track the number and nature of uses/contacts between medical professionals and the resources created and/or distributed. (Q1-Q4)

Output B: Accredited continuing education courses

Anticipated out-comes for Q4	Actual outcomes	Next quarter
	No deliverables at this time.	Track the number and nature of continuing education courses for medical professionals created and/or distributed. (Q1-Q3)

Output C: Training sessions for any/all stakeholders other than medical professionals

Anticipated out-comes for Q1-Q4	Actual outcomes	Next quarter
	No deliverables at this time.	Track the number of webinars/presentation s/training sessions for stakeholders other than medical professionals. (Q1-Q3)

<p>Track the number and nature of uses/contacts between all stakeholders (health departments, medical associations, etc.) and the resources created and/or distributed. (Q1-Q4)</p>	<p>PERC-med delivered the following training sessions and educational materials for stakeholders other than medical professionals:</p> <ol style="list-style-type: none"> 1. PERC-med was introduced in a slide presentation to occupational health physicians at the American Occupational Health Conference (AOHC) in Anaheim on April 30, 2019. 2. Advisory Board member Dr. Diane Rohlman presented a poster describing paraquat poisoning symptoms and PERC-Med at the International Society for Agriculture Safety and Health (ISASH) conference on June 24-27, 2019 in Des Moines, Iowa. The poster was written by the PERC-med team in collaboration with Diane Rohlman. 3. On October 29, 2019, Diana Simmes delivered a guest lecture at Oregon State University and distributed PERC-med promotional postcards to 12 graduate students, including MPH second year students and two doctoral students. 4. On November 19, 2019, Diana Simmes presented a talk on medical risk to over 80 licensed pesticide applicators during the first annual Willamette Valley CORE Pesticide Safety Education Program (PSEP) Training in Corvallis, Oregon. Diana Simmes talked about pesticide-related knowledge in the medical community. 5. On January 15, 2020, Diana Simmes participated as a guest speaker on the Tribal Pesticide Program Council (TPPC) Executive Committee and shared the extended deadline for PERC-med's request for project ideas. Diana gave a 15-minute presentation on PERC-med and sent the presentation slides to TPPC Executive Committee after the meeting. 6. In February 2020, the newsletter article "Pesticides for COVID-19 Infection Control" written by PERC-med was distributed by the Community Health Association of Mountain/Plain States (CHAMPS) to their listserv with 1,466 subscribers. The article included links to the PERC-med resources webpage. <p>PERC-med widely distributed the request for project ideas solicitation and received project ideas submissions from the following stakeholder organizations:</p> <ol style="list-style-type: none"> 1. Center for Healthcare Policy and Research, University of California, Davis 2. Department of Environmental & Occupational Health Sciences, University of Washington 3. Lurie Children's Hospital, Northwestern University 4. National Pesticide Information Center, Oregon State University 5. Northwest Center for Alternatives to Pesticides 6. Office of Environmental Health Hazard Assessment, California Environmental Protection Agency 	<p>Track the number and nature of uses/contacts between all stakeholders (health departments, medical associations, etc.) and the resources created and/or distributed. (Q1-Q4)</p>
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	<p>7. Office of Environmental Public Health Sciences, Washington State Department of Health</p> <p>8. Oregon Institute of Occupational Health Sciences, Oregon Health & Science University</p>	
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Output D: A number of stakeholders receiving technical assistance to integrate the core skills into practice

Anticipated out-comes for Q1-Q4	Actual outcomes	Next quarter
Track the number of stakeholders served with technical assistance to integrate the core skills into practice, for example, using apps, online modules and other tools. (Q1-Q4)	Technical assistance was provided to the Northwest Center for Alternatives to Pesticides (NCAP) by Diana Simmes in response to their solicitation submission. Based on NCAP's particular request, PERC-med provided a walk-through of the American Association for Laboratory Accreditation website , PERC-med resources and National Environmental Education & Training Foundation (NEETF) resources .	Track the number of stakeholders served with technical assistance to integrate the core skills into practice, for example, using apps, online modules and other tools. (Q1-Q4)

Objective 2: Update existing and/or develop new materials and resource tools.

Output A: A number of tested resources distributed to clinicians and other stakeholders

Anticipated out-comes for Q1-Q4	Actual outcomes	Next quarter
Track the number of tested resources distributed. (Q4)		
Track the number of subscribers for email distribution list(s). (Q1-Q4)	PERC-med has created an email distribution list to share information and updates. PERC-med has not received email list subscribers.	Track the number of subscribers for email distribution list(s). (Q1-Q4)

Output B: A marketing plan that accompanies each resource and tool developed

Anticipated out-comes for Q1-Q4	Actual outcomes	Next quarter
Track milestones in developing a marketing strategy for PERC-med. (Q3-Q4)	<p>The PERC-med promotional postcard was distributed at in-person meetings and shared with partner organizations for marketing purposes.</p> <p>PERC-med resources and the request for project ideas solicitation were distributed via email to partner organizations to share broadly amongst their networks.</p>	

	PERC-med has begun searching for a UC-approved vendor to assist with marketing in an effort to increase web-traffic and email list subscribers.	
Track milestones in developing and executing marketing activities for each resource and tool developed. (Q1-Q4)	<p>PERC-med's current marketing strategy focuses on notifying the Advisory Board and stakeholder groups via email about our published materials. PERC-med has made 30 direct contacts for distributing information among stakeholder groups. (See stakeholder groups list under Program Highlights and Summary.)</p> <p>PERC-med received 10 project proposals after widely distributing the request for project ideas solicitation.</p> <p>PERC-med has developed partnerships with several groups to distribute resources via the following avenues:</p> <p>Posted PERC-med materials on their website:</p> <ul style="list-style-type: none"> • AgriSafe Network Nurse Scholar Program (Potential reach: 31 nurse scholars) • Oregon Poison Control featured PERC-med on their Healthcare Professionals webpage and created a webpage dedicated to PERC-med. (Potential reach: 39 hits on Healthcare Professionals webpage in January 2020; no reach metrics are available at this time for the PERC-med partnership webpage.) <p>Shared PERC-med written articles with their listserv:</p> <ul style="list-style-type: none"> • Community Health Association of Mountain/Plains States (CHAMPS) (Potential reach: 1,466 subscribers) <p>Social media posts:</p> <ul style="list-style-type: none"> • Oregon Health and Science University/Oregon Poison Control has expressed interest in creating a social media post promoting information from the paraquat poisoning information sheet in spring 2020. (Potential reach: 1,314 Facebook followers, 417 Twitter followers, and 115 Instagram followers) 	Track milestones in developing and executing marketing activities for each resource and tool developed. (Q1-Q4)

Output C: One or more new resources developed each project year, such as mobile apps compatible with poisoning surveillance and monitoring systems to more easily report pesticide exposures, materials or resources that promote recognition, diagnosis, treatment and prevention of pesticide-related illness in the practice setting

Anticipated outcomes for Q1-Q4	Actual outcomes	Next quarter
Track the number and nature of electronic-only resources developed, such as mobile apps, online courses, and/or databases. (Q1-Q4)	<p>PERC-med has developed and shared the following electronic resources: The first two are webpages on the PERC-med website.</p> <ol style="list-style-type: none"> 1. “Paraquat Poisoning: One Sip Can Kill” informational sheet published by PERC-med 2. “Medical Evaluations Prior to Using a Respirator: What medical professionals need to know” informational sheet published by PERC-med 3. “Pesticides for COVID-19 Infection Control” written article published in Community Health Association of Mountain/Plain States (CHAMPS) listserv 4. “Pesticide Exposures and Healthcare Providers” webinar for the AgriSafe Nurse Scholar Program 	Track the number and nature of electronic-only resources developed, such as mobile apps, online courses, and/or databases. (Q1-Q4)
Track the number and nature of printable resources developed and/or improved such as clinical toxicology briefs, clinical guidelines and/or checklists. (Q1-Q4)	<p>PERC-med has developed the following printable resources:</p> <ol style="list-style-type: none"> 1. A one-page printable resource based on information from the paraquat poisoning poster presented by Advisory Board member Dr. Diane Rohlman at the International Society for Agriculture and Safety (ISASH) conference. 2. An occupational respirator use and medical evaluation printable information sheet, reviewed by two subject matter experts, Charlotte Halverson and Robin Tutor Marcom. 	Track the number and nature of printable resources developed and/or improved such as clinical toxicology briefs, clinical guidelines and/or checklists. (Q1-Q4)

Output D: A website that is updated and maintained for access to pesticide-related resources and links to partners and tools

Anticipated out-comes for Q1-Q4	Actual outcomes	Next quarter
Track milestones in maintaining/improving the website. (Q4)	<p>PERC-med enhanced its website by:</p> <ol style="list-style-type: none"> 1. Adding an announcement banner to the homepage 2. Adding new Advisory Board members to the Advisory Board page 3. Adding new staff to the Meet Our Team page 4. Adding the PERC-med support email to the About page and the website footer 5. Creating the "Request for Project Ideas 2020" solicitation page and submission form 6. Fixing the email updates subscription page as reported in this year's quarter 3 report 7. Posting additional resources including the PERC-med informational sheets on paraquat and respirator medical evaluations 8. Updating the calendar of events <p>PERC-med has begun work on revamping its resource webpage to be better suited for a medical professional audience and enhance overall usability.</p>	
Track reach / engagement using web analytics. (Q1-Q4)	<ul style="list-style-type: none"> • The PERC-med website received 2114 views in Quarter 4, totaling 6675 views in Year 2. • The PERC-med resources webpage received 484 views in Quarter 4, totaling 841 views in Year 2. • The PERC-med paraquat poisoning information sheet received 68 views in Quarter 4, totaling 93 views in Year 2. • The PERC-med respirator medical evaluation information sheet was posted in Quarter 4 and received 24 views. 	Track reach / engagement using web analytics. (Q1-Q4)

Output E: Four or more pesticide-related articles (i.e. case studies, newsletter items, blogs, etc.) developed and/or distributed in relevant media each year, with estimated audiences

Anticipated out-comes for Q1-Q4	Actual outcomes	Next quarter
Track the number of articles/pieces written/distributed annually. (Q4)	<p>PERC-med created and distributed the following pesticide-related materials throughout the year:</p> <ol style="list-style-type: none"> 1. "Paraquat Poisoning: One Sip Can Kill" informational sheet 2. "Medical Evaluations Prior to Using a Respirator: What medical professionals need to know" informational sheet 3. "Pesticides for COVID-19 Infection Control" written publication 	

	4. "Pesticide Exposures and Healthcare Providers" webinar	
Track the approximate reach/engagement/audience for each article/piece. (Q4)	<p>Each published and distributed pesticide-related material had the following approximate reach:</p> <ol style="list-style-type: none"> 1. "Paraquat Poisoning: One Sip Can Kill" – published on PERC-med resources page with 93 views. 2. "Medical Evaluations Prior to Using a Respirator: What medical professionals need to know" – published on PERC-med resources page with 24 views. 3. "Pesticides for COVID-19 Infection Control" – published in Community Health Association of Mountain/Plain States (CHAMPS) listserv with 1,466 subscribers 4. "Pesticide Exposures and Healthcare Providers" – webinar posted in the AgriSafe Nurse Scholar Program with 31 nurse participants in 2019 and 50 nurse participants in 2020. 	

Output F: An evaluation strategy/plan to measure effectiveness of outreach activities and/or educational materials

Anticipated outcomes for Q1-Q4	Actual outcomes	Next quarter
Track milestones in developing and executing marketing activities. (Q1-Q4)	<p>PERC-med has completed development of an internal database as a method to track all activities and progress towards milestones.</p> <p>PERC-med materials have been posted as resources on partner organization webpages including:</p> <ul style="list-style-type: none"> • The "Paraquat Poisoning: One Sip Can Kill" information sheet and PERC-med promotional postcard posted in Dr. Diane Rohlman's Rural PREP teaching kit titled, "Agricultural Exposures: Organophosphate Pesticide Poisoning and Prevention" • The webinar "Pesticide Exposures and Healthcare Providers" presented by Diana Simmes and the paraquat poisoning information sheet posted in the AgriSafe Nurse Scholar Program's learning lab • The paraquat poisoning and the respiratory medical evaluation information sheets posted on the Oregon Poison Center's Healthcare Professionals webpage • The ISASH paraquat poisoning poster sent to the Association of Public Health Nurses (APHN) for use in their public health nursing residency toolkit. <p>The PERC-med promotional postcard was distributed at in-person meetings and shared with partner organizations for marketing purposes.</p>	Track milestones in developing and executing marketing activities. (Q1-Q4)

	PERC-med has begun searching for a UC-approved vendor to assist with marketing in an effort to increase web-traffic and email list subscribers.	
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Objective 3: Conduct outreach to existing and new audiences to use materials and tools.

Output A: A number of stakeholders accessing high-quality pesticide-related training materials

Anticipated out-comes for Q1-Q4	Actual outcomes	Next quarter
Measure web traffic to PERC-med resource collections. (Q1-Q4)	The PERC-med resources webpage received 484 views this quarter, totaling 841 views in Year 2.	Measure web traffic to PERC-med resource collections. (Q1-Q4)

Output B: A number of stakeholders receiving technical assistance on the availability of pesticide-related training materials

Anticipated out-comes for Q1-Q4	Actual outcomes	Next quarter
Track the number of stakeholders served with technical assistance on the availability of pesticide-related training materials. (Q1-Q4)	Technical assistance was provided to the Northwest Center for Alternatives to Pesticides (NCAP). Based on NCAP's particular request, PERC-med provided a walk-through of the American Association for Laboratory Accreditation website , PERC-med resources and National Environmental Education & Training Foundation (NEETF) resources .	Track the number of stakeholders served with technical assistance on the availability of pesticide-related training materials. (Q1-Q4)
Track the number and nature of partnerships to apply technical knowledge in practice. (Q1-Q4)	PERC-med engaged in collaborative discussions with the North Carolina Agromedicine Institute to provide technical assistance in revising their existing online pesticide education courses for healthcare professionals. This course was developed in collaboration with Eastern AHEC. PERC-med is in preliminary discussions with Dr. Diane Rohlman to develop an online pesticide education module based on Dr. Rohlman's existing Agricultural Safety and Health: The Core Course training with collaboration focusing on compilation of case studies.	Track the number and nature of partnerships to apply technical knowledge in practice. (Q1-Q4)

Objective 4: Develop partnerships and a sustainable network of stakeholders.

Output A: Two or more strategic meetings organized to promote the recognition, diagnosis, treatment and/or prevention of pesticide-related illness in medical practice settings

Anticipated outcomes for Q1-Q4	Actual outcomes	Next quarter
Track the number and nature of strategic meetings attended throughout the year, reportable in Q4. (Q4)	<p>PERC-med has attended four strategic meetings throughout Year 2:</p> <ul style="list-style-type: none"> American Occupational Health Conference (April 2019) Northwest Regional Primary Care Association and Community Health Association of Mountain / Plains States Fall Primary Care Conference (October 2019) Oregon Public Health Association Annual Conference and Meeting (October 2019) Pesticide Safety Education Program (November 2019) <p>PERC-med submitted two abstracts for oral presentation in strategic meetings for Year 3:</p> <ul style="list-style-type: none"> Association of Public Health Nurses (APHN) Annual Conference (accepted) National Hispanic Medical Association's 2020 Health Conference (not accepted) 	
Track the number and nature of presentations delivered for/with key stakeholders. (Q4)	<p>PERC-med delivered the following presentations for key stakeholders:</p> <ol style="list-style-type: none"> A PERC-med introductory slide was given at the American Occupational Health Conference (AOHC) on April 30, 2019. Advisory Board member Dr. Diane Rohlman presented a poster co-written by PERC-med describing paraquat poisoning symptoms at the International Society for Agriculture Safety and Health (ISASH) conference on June 24-27, 2019. On October 14, 2019, Diana Simmes gave a presentation describing the PERC-med cooperative agreement at the annual Oregon Public Health Association conference in Corvallis, OR. On October 29, 2019, Diana Simmes delivered a guest lecture at Oregon State University to 12 graduate students, including MPH second year students and two doctoral students. On October 30, 2019, Diana Simmes presented a webinar about pesticides to the AgriSafe Nurse Scholar's Program for the 31 program participants to view. On November 19, 2019, Diana Simmes presented a talk on health risk to over 80 licensed pesticide applicators during the Willamette Valley CORE 	

	<p>Pesticide Safety Education Program (PSEP) Training in Corvallis, Oregon.</p> <p>7. On January 15, 2020, Diana Simmes participated as a guest speaker on the Tribal Pesticide Program Council (TPPC) Executive Committee. Diana gave a 15-minute presentation on PERC-med and sent the presentation slides to TPPC Executive Committee after the meeting.</p>	
Track engagement in collaborative resource-prioritization, planning, development, marketing and/or evaluation. (Q1-Q4)	<p>PERC-med held quarterly Advisory Board meetings to solicit information about key resource needs, gather feedback about PERC Med resources, and review draft PERC-Med materials and resources.</p> <p>PERC-med has participated in several project teams developing new resources and/or resource collections:</p> <ol style="list-style-type: none"> 1. PERC-med collaborated with Advisory Board member Dr. Diane Rohlman to develop a poster describing paraquat poisoning symptoms, presented at the International Society for Agriculture Safety and Health (ISASH) conference on June 24-27. 2. The AgriSafe Nurse Scholars Program has partnered to host a webinar on pesticides presented by Diana Simmes. The webinar and associated PERC-med materials are posted in the program's learning lab for their participants to view. 3. PERC-med has continued preliminary discussions with North Carolina Agromedicine Institute to assist in revising their pesticide education courses for healthcare professionals which does not currently have continuing medical education units available. 4. PERC-med has continued preliminary discussions with Advisory Board member Dr. Diane Rohlman to develop an online pesticide education module based on the existing Agricultural Safety and Health: The Core Course training. 5. OPC has created a partnership webpage with PERC-med informational sheets and promotional postcard. 6. PERC-med received 10 project proposals from the request for project ideas solicitation. The PERC-med team will present "green-light" project proposals to the Advisory Board for rating in March 2020 before pursuing. 	Track engagement in collaborative resource-prioritization, planning, development, marketing and/or evaluation. (Q1-Q4)

Output B: A number of new partnerships developed and existing partnerships maintained, and the number of people involved in those partnerships

Anticipated out-comes for Q1-Q4	Actual outcomes	Next quarter
Track the number of partnerships and achievements initiated through outreach. (Q1-Q4)	PERC-med has maintained contact with national membership-based medical provider organizations, including the APHN, 2 of AAFP Member Interest Groups and NEEF, with the goal of developing training opportunities and distributing resources for medical professionals.	Track the number of partnerships and achievements initiated through outreach. (Q1-Q4)

Output C: Planning and Reporting

Anticipated out-comes for Q1-Q4	Actual outcomes	Next quarter
Submit quarterly reports within 30 days of the close of the quarter.	<p>The third quarterly report for Year 2 was submitted within 30 days of the close of the quarter on December 20, 2019.</p> <p>This quarterly report includes a summary of expenditures, purchases, and other fiscal activities; a side-by-side comparison of actual accomplishments vs. project accomplishments; proposed timelines/milestones.</p>	Submit quarterly reports within 30 days of the close of the quarter.

Difficulties and Departures

A carryover note from the past quarter is that the green light was not given by our Advisory Board to develop online training as we had proposed in our original application. The Board's position has been that there is a sizable body of curriculum and education available but not necessarily being accessed or promoted by medical providers. As such, the Board encouraged PERC-med to curate a library of existing resources and focus on a marketing campaign to direct health care providers to that collection. This is why we have not yet utilized any of the budget set aside for curriculum development. PERC-med remains open to the creation of original educational content as well as promoting the work of others.

Another difficulty is a lack of full call attendance by the entire Advisory Board. To compensate for that and as a means to glean their input, Diana Simmes conducted Key Informed Interviews with each individual member. PERC-med will be making adjustments to its current Advisory Board in the next round of recruitments so we can gain assure full engagement.

PERC-med has not received many subscribers to our email list. PERC-med has begun searching for a UC-approved vendor to assist with marketing in an effort to increase web-traffic and email list subscribers.

Sub-Awards, Contracts and Other Agreements

As part of its project proposal, UCDE named Oregon State University as a collaborator and therefore was not required to compete this sub-award further. Kaci Buhl serves as the Principal Investigator. The total for Project Year 2019 was budgeted at \$50,000. Invoices for Q1-Q3 expenses are \$36,225 and are on track with their projected budget. PERC-med will report the amount Q4 in the reporting table once we receive invoices for those and they have cleared the accounting ledgers.

Amended Annual Budget with Carryover - Project Year One (2018) to Year Two (2019)

Project Year 2019	Original Budget	Carryover Applied from Project Year 2018	Amended Budget
A. Personnel	\$137,516	\$101,686	\$239,202
B. Benefits	\$72,894	\$52,502	\$125,396
C. Travel	\$6,338	\$4,849	\$11,187
D. Equipment	\$0	\$0	\$0
E. Program Supplies	\$2,500	\$1,280	\$3,780
F. Contractual	\$36,000	\$46,000	\$82,000
G. Construction	\$0	\$0	\$0
H. Other	\$38,415	\$33,650	\$72,065
H. Other (indirect exempt)	\$59,506	\$35,605	\$95,111
Total Direct Costs	\$353,169	\$275,573	\$628,742
Total Modified Direct Costs (MTDC)	\$293,663	\$264,967	\$558,630
I. Indirect Costs	\$146,831	\$132,483	\$279,314
Total Expenses:	\$500,000	\$408,055	\$908,055

Quarterly Budget Expenditures – Project Year Two 2019

Project Year 2019	Q1	Q2	Q3	Q4	Cumulative	Amended Budget from above	% Used of Amended
A. Personnel	\$22,986	\$31,378	\$33,705	\$34,864	\$122,933	\$239,202	51.39%
B. Benefits	\$12,195	\$15,225	\$19,424	\$17,215	\$64,059	\$125,396	51.08%
C. Travel	\$1,245	\$1,144	\$2,976	\$806	\$6,171	\$11,187	55.16%
D. Equipment	\$0	\$0	\$0	0	\$0	\$0	--
E. Program Supplies	\$0	\$303	\$466	\$55	\$825	\$3,780	21.83%
F. Contractual	\$0	\$0	\$0	0	\$0	\$82,000	0%
G. Construction	\$0	\$0	\$0	0	\$0	\$0	--
H. Other	\$0	\$0	\$11	\$95	\$105	\$72,065	0.15%
H. Other (indirect exempt)	\$0	\$0	\$24,796	\$11,429	\$36,225	\$95,111	38.09%
Total Direct Costs	\$36,426	\$48,050	\$81,378	\$64,463	\$230,317	\$628,742	36.63%
Total Modified Direct Costs (MTDC)	\$36,426	\$48,050	\$56,582	\$53,034	\$194,092	\$534,730	36.30%
I. Indirect Costs	\$18,213	\$24,025	\$28,291	\$26,517	\$82,098	\$279,314	29.39%
Total Expenses:	\$54,639	\$72,075	\$109,669	\$90,980	\$312,415	\$908,055	34.40%

Resources used in Q1-4 amount to approximately \$312,415 representing 34.40% of the amended award amount for Project Years 2018 & 2019 (Years One and Two.) Additional direct expenses will continue to post after Quarter 4 (such as the OSU Q4 invoice) and will be reflected in subsequent drawdowns and an amended annual report.